

WHAT IS CLAIMED IS:

1. A service provisioning mechanism for a service gateway connecting at least one local client to an external network, the service provisioning mechanism comprising:
 - 5 a resolver responsive to a request from a requestor for a service to determine whether a requested service is provided by the service gateway;
 - a negotiator responsive to an indication from the resolver that a requested service is not provided by the service gateway to query an external source for identifying
 - 10 a further service for attempting to satisfy the service request; and
 - at least one response engine for processing information provided by the external source in response to the negotiator query.
2. The service provisioning mechanism of claim 1, including a record identifying a service module for performing a service provided at the service gateway.
- 15 3. The service provisioning mechanism of claim 2, wherein the record is a registry of services registered at the service gateway.
- 20 4. The service provisioning mechanism of claim 1, wherein the resolver is operable to respond to a request for a service by interrogating a service record to determine if the service is provided by the service gateway; and if said service is provided by the service gateway, to identify to the requestor a service module for performing the service; and
- 25 if said service is not provided by the service gateway, to call the negotiator for querying an external source for the identity of a further service to attempt to satisfy the service request.
5. The service provisioning mechanism of claim 1, wherein the resolver is an interface service registered at the service gateway.
- 30

6. The service mechanism of claim 1, wherein the negotiator is responsive to a call from the resolver to identify and query an external source for the identity of a further service to attempt to satisfy the service request.
- 5
7. The service provisioning mechanism of claim 6, wherein the negotiator is responsive to a response from the external source to attempt to select a response engine for processing information received from the external source.
- 10 8. The service provisioning mechanism of claim 7, wherein the negotiator is operable to interrogate the header of a response received from the external source to attempt to identify a message protocol for the response, whereby the response engine selected is a response engine configured to process a message formatted in the identified protocol.
- 15
9. The service provisioning mechanism of claim 1, wherein the negotiator resolver is an interface service registered at the service gateway.
10. The service provisioning mechanism of claim 1, wherein the response engine is configured to process a message formatted with at least one predetermined protocol.
- 20
11. The service provisioning mechanism of claim 1, wherein the response engine is an interface service registered at the service gateway.
- 25
12. The service provisioning mechanism of claim 1, wherein the service provisioning mechanism is operable within a support framework with each of the resolver, the negotiator and the response engine being services registered with the framework.

13. A computer program product for provisioning services for a service gateway that is operable to connect at least one local client to an external network, the computer program product comprising computer code on a carrier medium, the computer code being operable to provide:
- 5 a resolver service responsive to a request from a requestor for a service to determine whether a requested service is provided by the service gateway; a negotiator service responsive to an indication from the resolver service that a requested service is not provided by the service gateway to query an external source for the identity of a further service to attempt to satisfy the service request; and
- 10 at least one response engine for processing information provided by the external source in response to the negotiator service query.
14. The computer program product of claim 13, wherein the record is a registry of services registered at the service gateway.
15. A service gateway system configured for connecting at least one local client to an external network and comprising a processor, memory and computer program code operable to control the processor:
- 20 to provide a resolver service responsive to a request from a requestor for a service to determine whether a requested service is provided by the service gateway;
- to provide a negotiator service responsive to an indication from the resolver service that a requested service is not provided by the service gateway to query
- 25 an external source for the identity of a further service to attempt to satisfy the service request; and
- to provide at least one response engine that processes information provided by the external source in response to the negotiator service query.

16. The service gateway system of claim 15, including at least one interface for connection to an external network and at least one interface for connection to a local network to which a plurality of devices are connectable.
- 5 17. A service gateway system configured for connecting at least one local client to an external network, the service gateway system comprising a processor, memory and a service provisioning mechanism connecting at least one local client to an external network, the service provisioning mechanism comprising:
- 10 a resolver responsive to a request from a requestor for a service to determine whether a requested service is provided by the service gateway;
- a negotiator responsive to an indication from the resolver that a requested service is not provided by the service gateway to query an external source for identifying a further service for attempting to satisfy the service request; and
- 15 at least one response engine for processing information provided by the external source in response to the negotiator query.
18. The service gateway system of claim 17, including at least one interface for connection to an external network and at least one interface for connection to a local network to which a plurality of devices are connectable.
- 20 19. A method of provisioning services for a service gateway connecting at least one local client to an external network, the method comprising:
- 25 a) responding to a request from a requestor for a service to determine whether a requested service is provided by the service gateway;
- b) where a requested service is not provided by the service gateway, querying an external source for identifying a further service for attempting to satisfy the service request; and
- c) processing information provided by the external source in response to the query.
- 30

20. The method of claim 19, including determining whether a service is provided by the service gateway by interrogating a record of services registered with the service gateway.
- 5 21. The method of claim 19, comprising repeating steps (a), (b) and (c) until a service is found that is supported by the service gateway.
22. The method of claim 19, wherein step (a) includes interrogating a service record to determine if a service is provided by the service gateway;
10 if said service is provided by the service gateway, identifying to a requestor a service module for performing the service; and
if said service is not provided by the service gateway, passing to step (b).
23. The method of claim 19, wherein step (b) includes identifying and querying an
15 external source for the identity of a further service to attempt to satisfy the service request.
24. The method of claim 23, wherein step (b) further includes responding to a response from the external source to attempt to select a response engine for
20 processing information received from the external source.
25. The method of claim 24, wherein in step (b) the attempt to select a response engine includes interrogating the header of a response received from the external source to attempt to identify a message protocol for the response, whereby
25 the response engine selected is a response engine configured to process a message formatted in the identified protocol.
26. The method of claim 19, wherein step (c) includes processing a message formatted with at least one predetermined protocol.